Japan Geoscience Union Meeting 2010
(May 23-28 2010 at Makuhari, Chiba, Japan)

PEM024-P09 Room: Convention Hall Time: May 25 17:15-18:45

Low latitude side boundary of polar hiss

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Latitudinal variation of magnetospheric whistler-mode VLF hiss observed in
geomagnetic quiet and disturbed periods are investigated by using VLF electric field (50Hz-30 kHz) data of ISIS-2 received at Syowa station, Antarctica.
The wide band polar hiss is whistler-mode Cerenkov emissions generated by energetic electrons of 100 eV- 40 keV precipitating
from the plasmasheet boundary layer.
The low-latitude bounbary of polar hiss lies at geomagnetic invariant
latitudes above 70 deg. in quiet period and below 65 deg. in disturbed one.
Is the low-latitude boundary of polar hiss simply an inner boundary of
precipitating electrons causing the polar hiss ?
In fact, the polar hiss is not observed near the plasmapause.

Keywords: Polar hiss, Low latitude side boundary, Magnetic activity dependency,
Polar magnetosphere, Whistler-mode VLF waves, Cherenkov radiation